## REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 11-25 are presently active in this case, Claims 11 and 24 having been amended by way of the present Amendment. Care has been taken such that no new matter has been entered. The Applicants respectfully request the entry and consideration of the amendments set forth herein as they merely clarify the language of the claims and place the application into condition for allowance.

In the outstanding Official Action, Claims 11-18 and 21-25 were rejected under 35 U.S.C. 102(a) as being anticipated by Schnaibel et al. (WO 02/08594 A1, which has English equivalent U.S. Patent No. 6,862,880). Claims 17 and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Schnaibel et al. in view of design choice. For the reasons discussed below, the Applicants request the withdrawal of the art rejections.

In the Office Action, the Schnaibel et al. reference is indicated as anticipating Claims 11 and 24. The Applicants note that a claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. As will be demonstrated below, this reference clearly does not meet each and every limitation of the pending independent Claims 11 and 24.

Claim 11 of the present application recites a method for control of operation of a nitrogen oxides trap, wherein a first oxygen sensor is disposed in an exhaust pipe downstream from the nitrogen oxides trap, the method comprising observing evolution of a meaningful signal representative of a signal delivered by the first oxygen sensor, and using an increase of

the meaningful signal from a first plateau of substantially constant level, reached following a variation in the meaningful signal subsequent to a changeover of the engine from running on a lean mixture to running on a rich mixture, to a second plateau of a substantially constant level as an indicator to command an end of purging. Claim 24 recites a device for control of an operation of a nitrogen oxides trap comprising a first oxygen sensor disposed on an exhaust line downstream from the nitrogen oxides trap, and calculating means for determining an increase of a meaningful signal representative of the signal delivered by the first oxygen sensor from a first plateau of substantially constant level, reached following a variation in the meaningful signal at initiation of a purging operation, to a second plateau of substantially constant level and using the increase as an indicator to command an end of purging. The Applicants submit that the cited references fail to disclose all of the above limitations.

The Schnaibel et al. reference describes a method of operating a catalytic converter arranged in the exhaust gas of an internal combustion engine. The Schnaibel et al. reference describes a rear exhaust-gas sensor (14) that is arranged after the catalytic converter (12). The Schnaibel et al. reference indicates that one may infer that the regeneration phase (32) of nitrogen-oxide storage catalyst (12') has ended, when the gradient of the output signal (31) of the exhaust-gas sensor (14) exceeds a specifiable limiting value, or, alternatively, one may deduce that regeneration phase (32) has ended when the gradient of output signal (31) of exhaust-gas sensor (14) initially exceeds a specifiable, first limiting value and then falls below a specifiable, second limiting value. According to this alternative embodiment, the transition of the curve of output signal (31) from the relatively steep slope to a constant level

(a point of inflection of the curve of output signal 31) during oxygen regeneration phase (33) may be detected.

The Schnaibel et al. reference further describes that the oxygen concentration in the exhaust gas after catalytic converter (12) decreases further towards the end of oxygen regeneration phase (33), which leads to a further increase in output signal (31) of exhaust-gas sensor (14). The Schnaibel et al. reference indicates that this increase in output signal (31) is ascertained in order to detect the end of oxygen regeneration phase (33), and that one may deduce that the oxygen regeneration phase has ended, when the gradient of output signal (31) of exhaust-gas sensor (14) exceeds a specifiable, third limiting value, i.e. when the curve of output signal (31) exceeds a certain slope, or, as an alternative, one may deduce that oxygen regeneration phase (33) has ended, when the gradient of output signal (31) of exhaust-gas sensor (14) initially exceeds a specifiable, third limiting value and then falls below a specifiable, fourth limiting value again.

The Official Action indicates that the discussion in column 8, lines 13-21, of the Schnaibel et al. reference provides a teaching of the second plateau of Claims 11 and 24. The Applicants note that the discussion in column 8, lines 18-21, is with regard to deducing when the regeneration phase (32) has ended. The Applicants presume that the oxygen regeneration phase (33) is therefore being cited for the teaching of the second plateau.

The Applicants note that Claims 11 and 14 recite at least three distinct portion of the meaningful signal. The first portion is a variation in the meaningful signal subsequent to a changeover of the engine from running on a lean mixture to running on a rich mixture (Claim 11) and a variation in the meaningful signal at the initiation of a purging operation (Claim

24). The second portion is a first plateau of substantially constant level reach following the variation. And the third portion is a second plateau of substantially constant level, which is used as an indicator to command an end of purging.

If the oxygen regeneration phase (33) of the Schnaibel et al. reference is therefore being cited for the teaching of the second plateau, then the Applicants submit that the Schnaibel et al. reference must also teach a first plateau and a variation in the signal (31) prior to the first plateau. However, the Applicants submit that the Schnaibel et al. reference does not teach such features. Even if, for the sake of argument, the regeneration phase (32) is considered as the first plateau, the regeneration phase (32) is clearly not "reached following a variation subsequent to a changeover of the engine from running on a lean mixture to running on a rich mixture" as recited in Claim 11, and is clearly not "reached following a variation in the meaningful signal at the initiation of a purging operation" as recited in Claim 24. No such variation occurs prior to regeneration phase (32).

The Applicants submit that the Schnaibel et al. reference does not disclose all three portions of the signal as recited in Claims 11 and 24, including a variation and two plateaus. Even assuming for the sake of argument, that the oxygen regeneration phase (33) is a plateau, the Applicants submit that no other feature, either within phase (33) or outside of phase (33), is a plateau as claimed. If the Official Action is intending to cite any of the minor various inflection points or peaks of curves along the graph of signal (31) as a "plateau," then the Applicants submit that such an interpretation of the term "plateau" is unreasonable and improper. The Official Action implies that any constant level of an inflection point of a curve or possibly even a peak of a curve can be cited for the teaching of a plateau of the

present invention. The Official Action defines the term "plateau" as "a region of little or no change in graphic representation;" however, the Official Action does not indicate where this definition is cited from. The Applicants respectfully submit that an inflection point at an inflection point or at a peak of a continuously curving surface cannot reasonably be interpreted to read on a "plateau," as recited in Claims 11 and 24. The Applicants noted that Webster's II, New College Dictionary defines a "plateau" as "1. An elevated and fairly level expanse of land...." A *point* at which no change is present (inflection point or peak of a continuous curve) is clearly not an *expanse* of land.

Thus, the Applicants submit that the Schnaibel et al. reference does not disclose using an increase of a meaningful signal from a first plateau of substantially constant level, reached following a variation in the meaningful signal subsequent to a changeover of the engine from running on a lean mixture to running on a rich mixture, to a second plateau of substantially constant level as an indicator to command an end of purging, as recited in Claim 11, or calculating means for determining an increase of a meaningful signal representative of the signal delivered by the first oxygen sensor from a first plateau of substantially constant level, reached following a variation in the meaningful signal at initiation of a purging operation, to a second plateau of substantially constant level and using the increase as an indicator to command an end of purging, as recited in Claim 24.

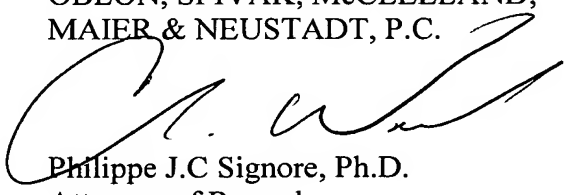
Accordingly, the Schnaibel et al. reference fails to disclose all of the limitations recited in independent Claims 11 and 24 of the present application. Thus, the Applicants respectfully request the withdrawal of the anticipation rejections of independent Claims 11 and 24 based on the Schnaibel et al. reference.

The dependent claims are considered allowable for the reasons advanced for the independent claim from which they depend. These claims are further considered allowable as they recite other features of the invention that are neither disclosed nor suggested by the applied references when those features are considered within the context of their respective independent claim.

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Philippe J.C Signore, Ph.D.
Attorney of Record
Registration No. 43,992

Christopher D. Ward
Registration No. 41,367

Customer Number
**22850**
Tel. (703) 413-3000
Fax. (703) 413-2220
(OSMMN 10/01)

PJCS:CDW:brf
I:\atty\cdw\26xxxx\264300US6XPCT\am2.doc